

U.S. Patent Application No. 09/736,820  
Amendment dated October 4, 2004  
Reply to Office Action of July 13, 2004

**AMENDMENTS TO THE CLAIMS:**

This listing of claims will replace all prior versions, and listings, of claims in the application:

**LISTING OF CLAIMS:**

1. (currently amended) A floor surface covering comprising two or more polymeric flooring planks having edges, wherein said planks are connected to each other by a ~~bonding~~ chemical welding agent, wherein said ~~bonding~~ chemical welding agent is present on at least one of the edges of at least one of the planks, and wherein said ~~bonding~~ chemical welding agent comprises at least one solvent that at least bonds the edges of the planks.
2. (currently amended) The floor surface covering of claim 1, wherein said ~~bonding~~ chemical welding agent consists essentially of tetrahydrofuran.
3. (currently amended) The floor surface covering of claim 1, wherein said ~~bonding~~ chemical welding agent consists of tetrahydrofuran.
4. (currently amended) The floor surface covering of claim 1, wherein said ~~bonding~~ chemical welding agent comprises tetrahydrofuran, cyclohexanone, methylene chloride, dimethyl formamide, toluene, acetone, ethylene dichloride, methyl ethyl ketone, n-methyl pyrrolidone, methyl isobutyl ketone, dipropyl ketone, isophorone, methyl amyl ketone, nitrobenzene, methyl cyclohexanone, acetyl acetone, or combinations thereof.
5. (currently amended) The floor surface covering of claim 1, wherein said ~~bonding~~ chemical welding agent is present on at least each edge of each thermoplastic plank connected together to another thermoplastic plank.
6. (currently amended) The floor surface covering of claim 1, wherein said ~~bonding~~ chemical welding agent is present on two opposite edges of each individual plank.

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7. (currently amended) A method to connect two or more thermoplastic planks comprising the step of applying a bonding chemical welding agent to at least one edge of a plank and then connecting an edge of a second plank to said edge having said bonding chemical welding agent to connect the planks together;

wherein said bonding chemical welding agent comprises at least one solvent capable of bonding at least the edges of the planks.

8. (currently amended) The method of claim 7, wherein said bonding chemical welding agent comprises tetrahydrofuran.

9. (currently amended) The method of claim 7, wherein said bonding chemical welding agent comprises tetrahydrofuran, cyclohexanone, methylene chloride, dimethyl formamide, toluene, acetone, ethylene dichloride, methyl ethyl ketone, n-methyl pyrrolidone, methyl isobutyl ketone, dipropyl ketone, isophorone, methyl amyl ketone, nitrobenzene, methyl cyclohexanone, acetyl acetone, or combinations thereof.

10. (currently amended) The method of claim 7, wherein said bonding chemical welding agent consists essentially of tetrahydrofuran.

11. (currently amended) The method of claim 7, wherein said bonding chemical welding agent consists of tetrahydrofuran.

12. (currently amended) The method of claim 7, wherein said bonding chemical welding agent is applied to each edge of each thermoplastic plank connected to another thermoplastic plank.

13. (currently amended) The method of claim 7, wherein said bonding chemical welding agent is applied to two or more edges of at least one plank.

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14. (currently amended) The method of claim 7, wherein said bonding chemical welding agent is applied with a brush.

15. (currently amended) The method of claim 7, wherein said bonding chemical welding agent is applied by spraying.

16. (currently amended) The method of claim 7, wherein said bonding chemical welding agent is applied by dipping at least one edge of said plank in a container containing said bonding chemical welding agent.

17. (currently amended) The method of claim 7, wherein said bonding chemical welding agent is applied with a syringe-type applicator.

18. (currently amended) The method of claim 7, wherein said step of applying said bonding chemical welding agent is repeated to connect a multiplicity of planks together to form a surface covering.

19. (currently amended) A floor surface covering comprising two or more polymeric flooring planks and splines located between at least a portion of said polymeric planks, wherein at least a portion of said planks and splines are connected to each other by a bonding chemical welding agent comprising at least one solvent that bonds chemically welds at least the spline and plank together, wherein said bonding chemical welding agent is applied to at least one of the edges of at least one of the individual planks, splines, or both.

20. (currently amended) The floor surface covering of claim 19, wherein said bonding chemical welding agent comprises tetrahydrofuran, cyclohexanone, methylene chloride, dimethyl formamide, toluene, acetone, ethylene dichloride, methyl ethyl ketone, n-methyl pyrrolidone, methyl isobutyl ketone, dipropyl ketone, isophorone, methyl amyl ketone, nitrobenzene, methyl cyclohexanone, acetonyl acetone, or combinations thereof.

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21. (currently amended) A method to connect two or more thermoplastic planks with at least one spline connecting the planks comprising the step of applying a bonding chemical welding agent comprising at least one solvent capable of at least bonding chemically welding the plank and spline together to at least one edge of a plank, a spline connecting planks, or both, and then connecting an edge of a second plank to said spline to connect the planks together.

22. (previously presented) The floor surface covering of claim 1, wherein said polymeric flooring plank is in the shape of a tile.

23. (previously presented) The floor surface covering of claim 1, wherein said polymeric flooring plank has a polymeric core with a laminate affixed on the surface of the core.

24. (currently amended) A method to connect two or more thermoplastic planks comprising the step of connecting two or more planks together wherein joints are formed between the connected planks; and applying a bonding chemical welding agent to said joints;

wherein said bonding chemical welding agent comprises at least one solvent capable of at least bonding chemically welding the edges of the polymeric portion of the plank.

25. (currently amended) The method of claim 24, wherein said bonding chemical welding agent comprises tetrahydrofuran.

26. (currently amended) The method of claim 24, wherein said bonding chemical welding agent is applied through a nozzle.

27. (currently amended) The floor surface covering of claim 1, wherein said bonding chemical welding agent comprises at least two different solvents capable of at least bonding the edges of the polymeric portion of the plank.

28. (currently amended) The method of claim 7, wherein said bonding chemical welding agent comprises at least two different solvents capable of at least bonding the edges of the

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polymeric portion of the plank.

29. (currently amended) A method to connect two or more thermoplastic planks with at least one spline connecting the planks comprising the step of preassembling the polymeric planks with at least one spline to form joints at least between the spline and planks;

applying a ~~bonding~~ chemical welding agent to the joints to bond the planks and spline together; wherein said ~~bonding~~ chemical welding agent comprises at least one solvent capable of at least ~~bonding~~ chemical welding the edges of the polymeric portion of the plank, spline, or both.

30. (currently amended) The method of claim 29, wherein said ~~bonding~~ chemical welding agent is applied through a nozzle.

31. (canceled)

32. (canceled)